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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,494	11/19/2001	Alex P. Weaver	WEAVER.PT1	5181

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EXAMINER

GARCIA, ERNESTO

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,494

Applicant(s)

WEAVER, ALEX P.

Examiner

Ernesto Garcia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 9, it is unclear whether applicant is claiming a table with three or more joints or a double locking mortise joint as indicated in the preamble of the claim, which implies only one joint and contradictory to line 25. Furthermore, the limitation "three or more of said (the) joint" in line 25 is grammatically incorrect.

Regarding claims 10-14, the claims depend from claim 9 and therefore are indefinite.

Regarding claim 15, it is unclear to what features of the invention does the joint provide support and stabilization as recited in line 24. Furthermore, it is unclear whether tabletop edge and tabletop have the same connotation. If not, shouldn't the applicant claim the tabletop having a tabletop edge?

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 5-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim of U.S. Patent No. D456,644 in view of Corson, 6,283,564.

Regarding claim 1, with the exception of the second member not having a second mortise with its features as claimed, every other feature of the invention as claimed is shown. Carson teaches a second member **30** having a second mortise **90**, a top surface **A13**, and a bottom surface **A14**. The second mortise **90** has two opposing sides **A11** being generally parallel to each other. The second mortise **90** has a second mortise end **A12** connecting the opposing sides **A11**. The top surface **A13** and the bottom surface **A14** are next to the second mortise end **A12**. Carson teaches a second

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mortise on the second member to provide stability in making knock-down furniture when connected to the first mortise of a first member. Therefore, as taught by Corson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the second member have a second mortise to connect with the first mortise of the first member to provide stability in knock-down furniture.

Regarding claim 5, the design patent '644 (see attachment) shows both of the mortise corners **C100** are rounded.

Regarding claim 6, the first member is a table leg, and the second member is a corner of a tabletop.

Regarding claim 7, the first member further comprises an inner side and an outer side, the inner side and the outer side being substantially parallel to each other.

Regarding claim 8, the inner side and the outer side have a same curvature.

Regarding claim 9, with the exception of the tabletop edge not having a second mortise with its features as claimed, every other feature of the invention as claimed is shown. Carson teaches a tabletop edge **30** having a second mortise **90**, a top surface **A13**, and a bottom surface **A14**. The second mortise **90** has two opposing sides **A11** being generally parallel to each other. The second mortise **90** has a second mortise end **A12** connecting the opposing sides **A11**. The top surface **A13** and the bottom

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surface **A14** are next to the second mortise end **A12**. Carson teaches a second mortise on the tabletop edge to provide stability in making knock-down furniture when connected to the first mortise of a table leg. Therefore, as taught by Corson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the tabletop edge have a second mortise to connect with the first mortise of the table leg to provide stability in knock-down furniture.

Regarding claims 10 and 16, the design patent '644 shows the first mortise further comprises a first mortise corner **C100** and second mortise corner **C100**. The first mortise corner is located between the first mortise end and the gusset top. At least one of the two mortise corners **C100** is rounded.

Regarding claims 11 and 17, the design patent '644 shows both of the mortise corners **C100** are rounded (see attachment).

Regarding claims 12 and 18, the table leg has a height dimension longer than both a width dimension and a depth dimension of the table leg combined.

Regarding claims 13 and 19, the first member further comprises an inner side and an outer side, the inner side and the outer side being substantially parallel to each other.

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Regarding claims 14 and 20, the inner side and the outer side have a same curvature.

Regarding claim 15, the rejection is similar to claim 9 above. In addition, the design patent teaches, in Fig. 1, the joint provides support and stabilization without any additional support pieces.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9, 12, 15 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Elmer, 4,188,067.

Regarding claim 9, as best understood, Elmer discloses, in Figures 5 and 8, a double locking mortise joint comprising a table leg **16** and a tabletop edge **20**. The table leg **16** has a first mortise **46**, a first contact surface **B7**, and a second contact surface **B8**. The first mortise **46** is generally perpendicularly with respect to an axis **B3** of the table leg **16**. The first mortise **46** has a gusset body **100**, a gusset top **B4**, a head bottom **B5** and a first mortise end **B6**. The gusset top **B4** serves as one side of the

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triangular shape. The gusset top **B4** extends generally perpendicularly outwardly with respect to the axis **B3**. The head bottom **B5** is opposite to and generally parallel to the gusset top **B4**. The head bottom **B5** is shorter in length than the gusset top **B4**. The first mortise end **B6** is generally parallel to the axis **B3** and connects the gusset top **B4** and the head bottom **B5**. The second contact surface **B8** is next to the first mortise end **B6**. The first contact surface **B7** and the second contact surface **B8** are next to the first mortise end **B6**.

The tabletop edge **20** has a second mortise **82**, a top surface **B13**, and a bottom surface **B14**. The second mortise **82** has two opposing sides **B11** being generally parallel to each other, and a second mortise end **B12** connects the opposing sides **B11**. The top surface **B13** and the bottom surface **B14** are next to the second mortise end **B12**. The table leg **16** and the tabletop edge **20** are rigidly and snugly yet removably joined together at the first mortise **46** and the second mortise **82** by fitting the gusset top **B4** and the head bottom **B5** between the opposing sides **B11** of the second mortise **82**. The head bottom **B5** extends onto the top surface **B13**. The gusset top **B4** extends onto the bottom surface **B14**. The opposing sides **B11** extend onto the first contact surface **B7** and the second contact surface **B8**. The table leg of the joint is independently and separately removable.

Regarding claims 12 and 18, the table leg has a height dimension longer than both a width dimension and a depth dimension of the table leg combined.

Regarding claim 15, as best understood, Elmer discloses, in Figures 5 and 8, a double locking mortise joint comprising a table leg **16** and a tabletop edge **20**. The table leg **16** has a first mortise **46**, a first contact surface **B7**, and a second contact surface **B8**. The first mortise **46** is generally perpendicularly with respect to an axis **B3** of the table leg **16**. The first mortise **46** has a gusset body **100**, a gusset top **B4**, a head bottom **B5** and a first mortise end **B6**. The gusset top **B4** serves as one side of the triangular shape. The gusset top **B4** extends generally perpendicularly outwardly with respect to the axis **B3**. The head bottom **B5** is opposite to and generally parallel to the gusset top **B4**. The head bottom **B5** is shorter in length than the gusset top **B4**. The first mortise end **B6** is generally parallel to the axis **B3** and connects the gusset top **B4** and the head bottom **B5**. The second contact surface **B8** is next to the first mortise end **B6**. The first contact surface **B7** and the second contact surface **B8** are next to the first mortise end **B6**.

The tabletop edge **20** has a second mortise **82**, a top surface **B13**, and a bottom surface **B14**. The second mortise **82** has two opposing sides **B11** being generally parallel to each other, and a second mortise end **B12** connects the opposing sides **B11**. The top surface **B13** and the bottom surface **B14** are next to the second mortise end **B12**. The table leg **16** and the tabletop edge **20** are rigidly and snugly yet removably joined together at the first mortise **46** and the second mortise **82** by fitting the gusset top **B4** and the head bottom **B5** between the opposing sides **B11** of the second mortise **82**. The head bottom **B5** extends onto the top surface **B13**. The gusset top **B4** extends

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onto the bottom surface **B14**. The opposing sides **B11** extend onto the first contact surface **B7** and the second contact surface **B8**. The joint, itself, is able to provide support and stabilization without any additional support pieces.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elmer, 4,188,067 (see marked-up attachment), in view of Grisley, 5,711,356.

Regarding claim 1, Elmer discloses, in Figures 5 and 8, a double locking mortise joint comprising a first member **16** and a second member **20**. The first member **16** has a first mortise **46**, a first contact surface **B7**, and a second contact surface **B8**. The first mortise **46** is generally perpendicularly with respect to an axis **B3** of the first member **16**. The first mortise **46** has a gusset body **100**, a gusset top **B4**, a head bottom **B5** and a first mortise end **B6**. The gusset top **B4** serves as one side of the triangular shape. The gusset top **B4** extends generally perpendicularly outwardly with respect to the axis **B3**. The head bottom **B5** is opposite to and generally parallel to the gusset top **B4**. The

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head bottom **B5** is shorter in length than the gusset top **B4**. The first mortise end **B6** is generally parallel to the axis **B3** and connects the gusset top **B4** and the head bottom **B5**. The second contact surface **B8** is next to the first mortise end **B6**. The first contact surface **B7** and the second contact surface **B8** are next to the first mortise end **B6**.

The second member **20** has a second mortise **82**, a top surface **B13**, and a bottom surface **B14**. The second mortise **82** has two opposing sides **B11** being generally parallel to each other, and a second mortise end **B12** connects the opposing sides **B11**. The top surface **B13** and the bottom surface **B14** are next to the second mortise end **B12**. The first member **16** and the second member **20** are rigidly and snugly yet removably joined together at the first mortise **46** and the second mortise **82** by fitting the gusset top **B4** and the head bottom **B5** between the opposing sides **B11** of the second mortise **82**. The head bottom **B5** extends onto the top surface **B13**. The gusset top **B4** extends onto the bottom surface **B14**. The opposing sides **B11** extend onto the first contact surface **B7** and the second contact surface **B8**. The first mortise further comprises a first mortise corner **B15** and a second mortise corner **B16**. The first mortise corner **B15** is located between the first mortise end **B6** and the head bottom **B5**. The second mortise corner **B16** is located between the first mortise end **B6** and the gusset top **B4**.

However, at least one of the two mortise corners is not rounded. Grisley teaches between Figures 9b and 9c at least one of two mortise corners being rounded as part of

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a design choice. Therefore, as taught by Grisley, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make at least one of the two mortise corners being rounded instead of being square-edged as part of a design choice.

Regarding claim 5, Grisley teaches both of the two mortise corners are rounded (Fig. 9c).

Regarding claim 6, Elmer, as discussed above, discloses the first member **14** being a table leg; and, the second member **20** being a corner of a tabletop.

Regarding claim 7, Elmer teaches the first member **16** further comprises an inner side **B30** and an outer side **B31**. However, Elmer fails to disclose the first member comprising an inner side substantially parallel to the outer side. Applicant is reminded that it would have been obvious matter of design choice to make the inner side and the outer side parallel to each other since there is no significant problem being solved or that it will serve for any particular purpose.

Regarding claim 8, as modified in claim 7, above, it will be obvious matter of design choice to make the inner side and the outer side have a same curvature.

Claims 10, 11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elmer, 4,188,067 (see marked-up attachment), in view of Grisley, 5,711,356.

Regarding claims 10 and 16, the first mortise further comprises a first mortise corner **B15** and a second mortise corner **B16**. The first mortise corner **B15** is located between the first mortise end **B6** and the head bottom **B5**. The second mortise corner **B16** is located between the first mortise end **B6** and the gusset top **B4**.

However, at least one of the two mortise corners is not rounded. Grisley teaches between Figures 9b and 9c at least one of two mortise corners being rounded as part of a design choice. Therefore, as taught by Grisley, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make at least one of the two mortise corners being rounded instead of being square-edged as part of a design choice.

Regarding claims 11 and 17, as modified above, Grisley teaches both of the mortise corners are rounded.

Claims 13, 14, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elmer, 4,188,067 (see marked-up attachment).

Regarding claims 13 and 19, Elmer teaches the first member **16** further comprises an inner side **B30** and an outer side **B31**. However, Elmer fails to disclose the first member comprising an inner side substantially parallel to the outer side. Applicant is reminded that it would have been obvious matter of design choice to make the inner side and the outer side parallel to each other since there is no significant problem being solved or that it will serve for any particular purpose.

Regarding claims 14 and 20, as modified in claim 13, above, it will be obvious matter of design choice to make the inner side and the outer side have a same curvature.

Response to Arguments

Applicant's arguments with respect to claims 1 and 5-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. In particular, the new limitations "a gusset body having a substantially triangular shape, the gusset top serving as one side of the triangular shape" in lines 7 and 8 of claim 1, "a gusset body having a substantially triangular shape" in line 6 of

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claim 9 and in line 6 of claim 15, "three or more of said joint" in line 25 of claim 9, and the limitation "the joint provides support and stabilization" in line 24 of claim 15 provided the new grounds. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 703-308-8606. The examiner can normally be reached from 9:30-6:00. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 703-308-2686. Any inquiry of a

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general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



E.G.

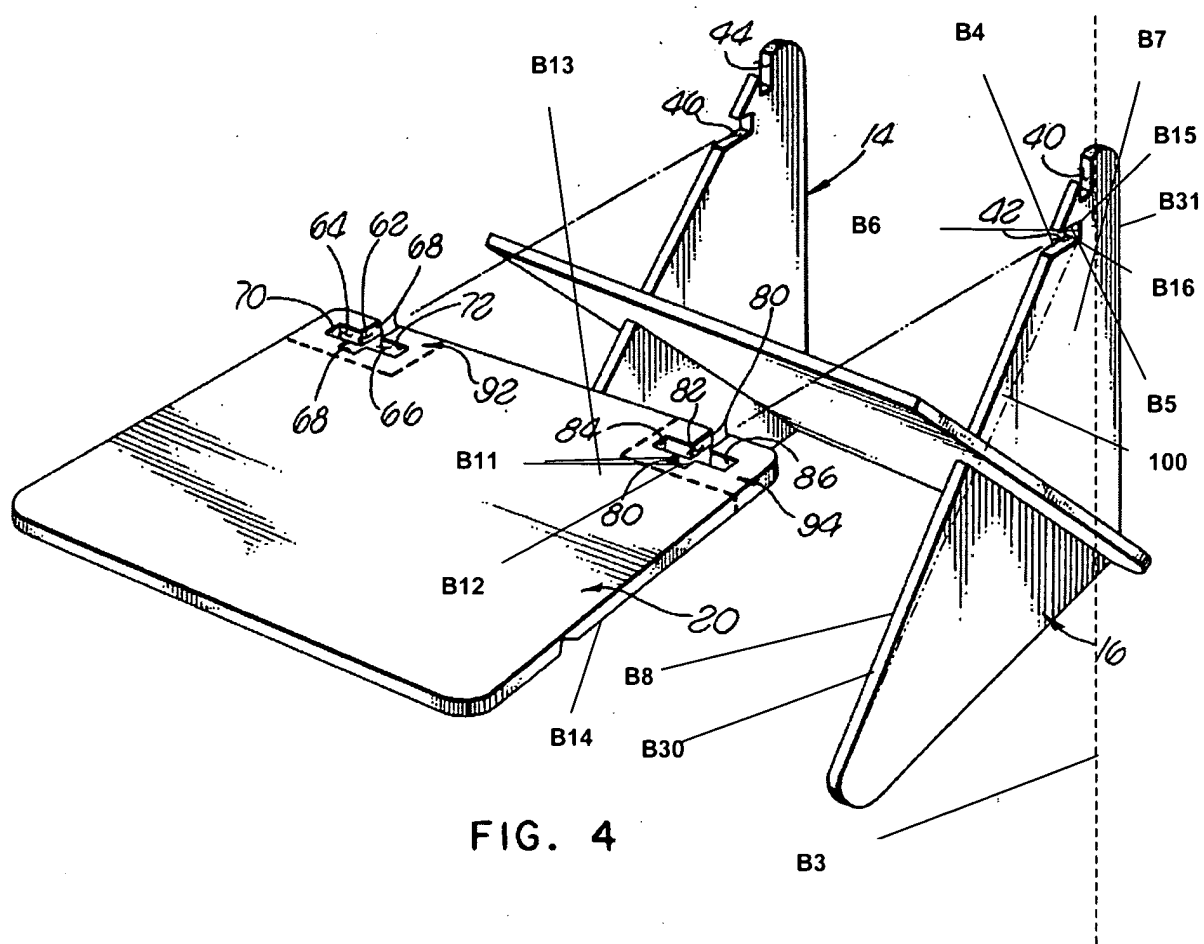
October 26, 2004

Attachments: one marked-up copy of Elmer, 4,188,067,
one marked-up copy of Weaver, D456,644, and,
one marked-up copy of Corson, 6,283,564

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

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(Elmer) 4,188,067



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(Weaver) D456,644

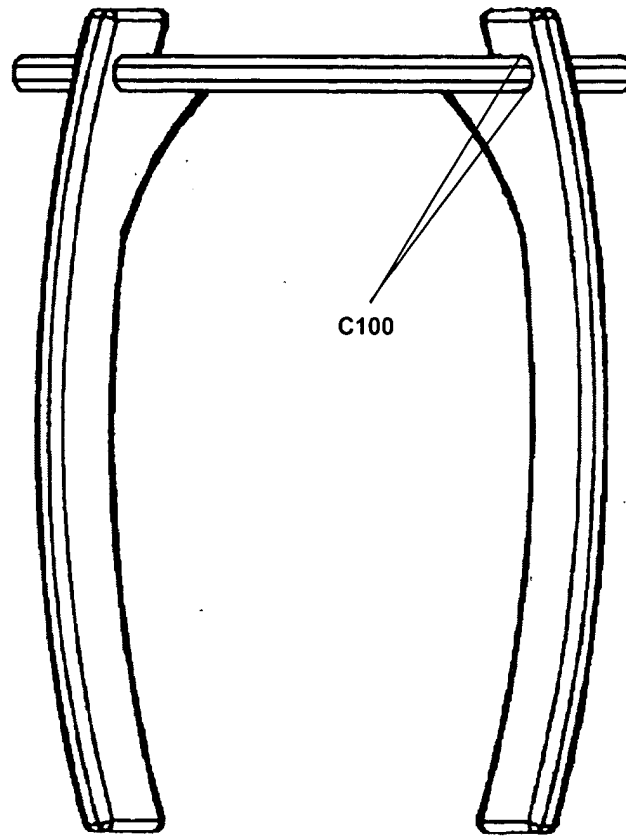


FIG. 4

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(Corson) 6,283,564

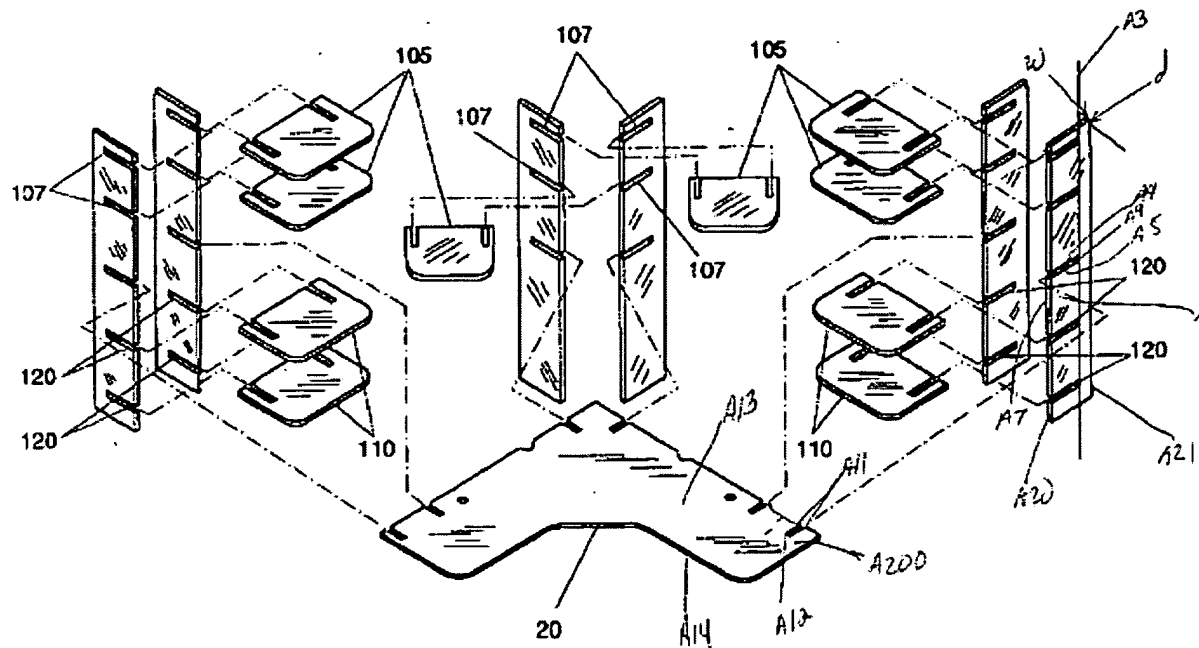


Figure 8

U.S. Patent

Sep. 4, 2001

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US 6,283,564 B1